

DO COLLEGE INSTRUCTORS HAVE IMPLICIT BIAS TOWARD LATINO-ACCENTED ENGLISH SPEAKERS?

Eunkyung Na, Ph.D.¹

ABSTRACT: The purpose of this study was to examine the implicit attitudes of college-level instructors toward Latino-accented English and the effects of gender, teaching experience, home language, race/ethnicity, and rank on those attitudes. The auditory Implicit Association Test (IAT) was used to measure the implicit accent preferences. Participants ($N = 93$) included college instructors at an urban university in Florida. In this study, instructors were defined as full-time and part-time faculty members and paid graduate assistants. Statistical analysis results suggested college instructors in this study exhibited some bias towards speakers of Latino-accented English. Gender, teaching experience, home language, race/ethnicity, and rank had no effect on implicit preference scores. Faculty, administrators, and students could use this study as a topic of discussion in faculty development, teaching assistant training, student services, diversity training, and hiring practices in higher education institutions. The discussions might help awareness of hidden-yet-present accent bias and prevent potential prejudice toward Latino-accented English speakers. Recommendations for further research were also provided.

Keywords: Accented English, accent prejudice, Implicit Association Test, implicit language attitudes

Language establishes a speaker's social identity as instantly as with gender or race (Lippi-Green, 2012). Accented language can reveal even more information such as national origins, homelands, ethnicities, or social classes about the speakers (Edwards, 1999; Giles & Johnson, 1987; Gluszek & Dovidio, 2010a; Lippi-Green, 2012; Neuliep & Speten-Hansen, 2013). A listener's evaluative reactions (i.e., attitudes) to language varieties whether it be standard accent, regional accent, or nonnative accent reflect the listener's language attitudes. Previous research has supported this notion by showing that listeners tended to make value judgments and formed linguistic prejudices based on the speaker's spoken language (Fuertes, Gottdiener, Martin, Gilbert, & Giles, 2012; Lambert et al., 1960; Nesdale & Rooney, 1996).

Language attitudes research since 1960s has shown that individuals who spoke a language with a nonnative accent were perceived more negatively than were those with a native accent (Bradac, 1990; Brown, 1992; Edwards, 1999; Fuertes et al., 2012; Lindemann, 2003, 2005; Pantos, 2010; Rubin & Smith, 1990; Rubin, 1992). The data collected in both English-speaking countries and non-English speaking countries showed the same results (Fuertes et al., 2012; Gluszek & Dovidio, 2010b). Particular native regional accents and dialects have also been associated with a range of negative stereotypic trait perceptions and viewed as less intelligent, less loyal, and less competent (Derwing & Munro, 2009; Lippi-Green, 2012). For example, in America, non-black Americans tend to judge African American Vernacular English (AAVE) as coming from ignorance or stupidity because of a lack of education (Lippi-Green, 2012). Attitudes toward southern American English were rather negative in comparison to a more *neutral* accent (Soukup, 2001). Latino-accented English speakers frequently perceived

¹ Eunkyung Na, Ph.D. ena@mail.usf.edu

negatively compared to native English speakers in previous research (Fuertes & Gelso, 2000; Giles, Williams, Mackie, & Rosselli, 1995).

Understanding prejudiced linguistic attitudes toward Latino-accented English has become important as the number of Latino-accented English speakers entering schools and workplaces in the US has been increased. There were 55 million Latinos in the US, the largest ethnic minority that constituted 17% of total US population (U.S. Census Bureau, 2014). About 38.4 million spoke Spanish at home in 2013. This was 120% increase compared to the number of Spanish speakers at home in 1993. Of 38.4 million Spanish speakers, 58% were bilingual (U.S. Census Bureau, 2013).

Past research indicated language attitudes influenced many aspects of an individual and society. When they are associated with critical decisions such as those involving jobs, promotions, tenure, or academic achievement, such prejudiced language attitudes can bias social interactions. However, decision makers (listeners) may not be aware of their negative language attitudes as being a form of discrimination as clearly as they might for the more high-profile issues of gender and race. This study attempted to access hidden language attitudes of college instructors toward Latino-accented English using an indirect measuring instrument, the auditory Implicit Association Test (IAT).

Theoretical Framework

The social identity theory and implicit social cognition theory served as the theoretical framework of this study. The social identity theory proposed by Tajfel & Turner (1986) assumes individuals tend to categorize the social world and perceive their social identities as group members. According to Tajfel (1982), social identity is a part of the individuals' self-concept which derives from the knowledge of their memberships in a social group or groups together with the value and emotional importance of that membership. The social identity theory involves intergroup relations between in-groups (our own groups) and out-groups (other groups). Tajfel argued that individuals vied for positive social identity by striving to achieve favorable comparison with out-groups. According to Tajfel, language is one of the categories in which individuals acquire positive social identities.

The social identity theory was relevant for this study as more language attitude research has been based on an intergroup (relationship between an in-group and out-groups) perspective (Ryan, 1983). In addition, language influences the perceptions of others (Giles & Johnson, 1981) and the language varieties speakers use, particularly accents and dialects, influences the perceptions of listeners (Eisenstein, 1983; Fishman, 1977; Giles & Johnson, 1981; McKirnan & Hamayan, 1984). Many studies have indicated nonnative accented speech signaled in-group and out-group membership status (Bresnahan, Ohashi, Nebashi, Liu, & Shearman, 2002; Reid & Giles, 2005). Listeners quickly make judgments or evaluations of what they had perceived.

The implicit social cognition theory posits social judgments are influenced by an automatic cognitive process of favorable or unfavorable feeling, thought, or action

toward a social object. Greenwald and Banaji (1995) termed these social judgments implicit attitudes and defined them as introspectively unidentified and inaccurately identified traces of past experiences that mediate favorable or unfavorable feeling, thought, or action toward social object. The implicit attitudes are the attitudes people do not express openly or even realize they hold while explicit attitudes are the ones people are consciously revealing. Banaji and Greenwald (2013) claimed that individuals hold stereotypes or biases as a result of the accumulated past experiences stored in the human brain. The implicit social cognition theory has been informative in understanding subconsciously held beliefs towards socially sensitive topics such as racial prejudice and sexual orientation (Levy, Stroessner, & Dweck, 1998).

Research Questions

The purpose of this research was to examine implicit attitudes toward Latino-accented English among instructors in higher educational settings. The research questions guided this study were:

1. What are the implicit preference of college instructors toward Latino-accented English as measured by the auditory Implicit Association Test (IAT)?
2. Does this implicit preference differ by gender?
3. Does this implicit preference differ by teaching experience?
4. Does this implicit preference differ by language background?
5. Does this implicit preference differ by race/ethnicity?
6. Does this implicit preference differ by rank?

Accent and Adults

Definition of an Accent

Many linguists expressed frustrations defining the word accent accurately (Pennington, 1996). This study used the definition of an accent attempted by Lippi-Green (2012). According to Lippi-Green, an accent is a loose reference to a specific *way of speaking* and it involves two widely recognized elements. They are prosodic features such as intonation, pitch, stress patterns, and rates of speaking and segmental features such as vowels and consonants.

In accent studies, Lippi-Green also emphasized the importance of distinguishing between the two types of accents: First Language (L1) accent and Second Language (L2) accent. In case of America, L1 accent is the native variety of spoken American English. According to Lippi-Green (2012), every native speaker of American English has an L1 accent. L1 accent is usually marked by geographic area with examples such as Appalachian accent, Southern accent, and New York accent. L1 accent is also marked by social features such as Black accents and Native American/Indian accents and further by other social identity accents such as race, ethnicity, income, religion, and gender.

L2 accent, which is the focus of this study, includes prosodic features (intonation, pitch, stress patterns, and rates of speaking) and segmental features (vowels and consonants) distinctive in people who learned English as a second language or a foreign language. L2 accent is usually the result of the L1 interference, which means prosodic and segmental features of the native language transfer into the second language (Lippi-Green, 2012; Parker & Riley, 2010). It is worth repeating that language attitudes are closely related to the listeners' evaluative judgment of speakers (Bradac et al., 2001). Therefore, in language attitude studies including this one, how listeners perceive L2 accent is more meaningful than how an individual speaks with the L2 accent. L2 accent is an extremely salient feature among speech varieties (Major, 2007; Scovel, 1988). Fuertes et al. (2012) claimed listeners made evaluative judgments as soon as they heard a single word such as "hello."

Accent Acquisition and Adults

Researchers generally agree that the majority of adults who learn a second language will speak with an accent with very few exceptions (Derwin & Munro, 2009; Scovel, 1988). Many researchers explained the importance of the start age of L2 acquisition for an accent-free L2, but the critical age varied slightly according to researchers (Tahta, Wood, & Loewenthal, 1981). Scovel (1988) suggested that nearly all individuals who started learning L2 after the *age of 12* had a detectable accent. Tahta et al. (1981) presented the following accent study results and claimed their results matched well with those of other studies: accent-free L2 if L2 is acquired by age 6, slight accent if acquired by the ages 7-11, and usually very marked accent if acquired after the ages 12-13. Their study showed the chances to speak accent-free L2 were minimal if L2 was acquired past the language acquisition period. In addition, levels of nonnative accent, from light to heavy, correlated with number of factors such as age of L2 acquisition, formal L2 instruction, gender, length of residence in L2 country, L2 use at home, and experience (Major, 2007; Tahta et al., 1981).

The above studies implied that adults who started to learn English after the ages of 12-13 had to speak with their nonnative accents all their adult lives. Considering the strong effect of accents in social evaluations (Fuertes et al., 2012), this could be a huge disadvantage to these adult speakers as they would be evaluated initially based on nonnative accent. The disadvantage would be greater with the impact of accent by context. The study result by Fuertes et al. (2012) indicated standard accent was favored with much stronger effect in formal and high stakes contexts such as job interviews and sales positions.

Literature Review

As mentioned earlier, past research on language attitudes showed that listeners evaluated nonnative-accented speakers more negatively than those who were perceived to speak native-accented American English simply based on accent of the nonnative speakers (Brown, 1992; Fuertes et al., 2012; Lippi-Green, 2012; Williams, Hewett, Miller, Naremore, & Whitehead, 1976). Latino-accented English speakers were frequently

viewed negatively compared to native English speakers in previous research (Fuertes & Gelso, 2000; Giles et al., 1995). The speakers of various Latino-accented English speakers were perceived to be less competent than speakers of native English varieties in the United States (Bradac & Wisegarver, 1984; Carranza, 1982; Fuertes & Gelso, 2000) and worldwide (Giles et al., 1995). Latino-accented English speakers were also judged to be of lower socio-economical class compared to standard-accented speakers (Ryan & Sebastian, 1980).

Frumkin (2007) examined the effect of three foreign accents of Mexican, German, and Lebanese and ethnic background in eyewitness testimony in a criminal trial setting. The researcher prepared three-minute videotaped speeches with six accent variations including Mexican, German, Lebanese, accented- and accent-free English. The text of the testimony was identical. Participants were undergraduate students ($N = 174$). The researcher measured the perception of mock jurors on four favorability variables (i.e., credibility, accuracy, deceptiveness, and prestige) in eyewitness testimony using a self-report measure. Results indicated there was a significant main effect of accent for the four favorability variables. That meant the participants perceived the eyewitness who delivered the testimony with an accent as less favorable even when the text of the testimony was identical and the witness was the same person. In regard to the accent condition, the German-accented eyewitness was rated as the most favorable followed by the Mexican-accented one. The Lebanese-accented eyewitness was the least favored.

Fuertes and Gelso (2000) conducted a study on the perception of European American college students ($N = 212$) toward Latino counselors' accent and race. For accent condition, they used a Latino actor to create two one-minute recordings; Latino accent and no accent. The content was identical. The researchers employed the Counselor Rating Form-Short, Working Alliance Inventory-Short, Willingness Scale, and the Universality-Diversity Orientation (UDO) Scale as outcome measures. The result showed that the respondents preferred to work with non-accented counselors rather than with the accented counselors in long-term therapy. The result also suggested that the respondents with low UDO scores rated the non-accented counselors higher in attractiveness, trustworthiness, and expertness than the accented counselors.

Giles et al. (1995) examined the affective reactions and national identity of undergraduate students ($N = 83$) in southern California toward Anglo- and Latino-accented English. The researchers used Zahn and Hopper's (1985) Speech Evaluation Instrument (SEI) and the researcher-devised (Giles et al., 1995) National Identity Measure which attempted to assess the strength of the identification with their own country. The content of the recorded speech used in the study discussed the English-only controversy. The SEI adopted a three-factor model of language evaluation: superiority, attractiveness, and dynamism dimensions. The result showed Latino-accented speakers were rated low in superiority, but high in attractiveness. It also revealed that when an ethnically similar sounding speaker argued against the English only recorded speech, Anglo-accented respondents' affective reactions and national identity scales were rated high. The authors claimed this was the first research to investigate affective reactions and national identity in language attitude domain.

Ryan and Carranza (1975) evaluated reactions toward speakers of standard-accented English and Mexican-accented English. Participants were 21 European American and 21 African American high school students and 21 Mexican Americans. Participants listened to the Mexican-accented English and rated the speaker on 15 pairs of traits such as educated-uneducated and kind-cruel. The results showed standard-accented English speakers received higher ratings in both status (e.g., intelligent-unintelligent) and solidarity (e.g., pleasant-unpleasant) dimensions.

According to Lindemann (2005), American undergraduate students rated nonnative English speakers from Mexico and China as the most incorrect English speakers among many countries and evaluated most negatively. Lindemann asserted sociopolitical factors and familiarity of the countries may contribute to positive and negative evaluation of the nonnative speakers of those countries.

Method

The research used a quantitative design to investigate the implicit attitudes of college instructors toward Latino-accented English. This study was approved by the Institutional Review Board.

Sample

The total number of college instructors participated was 93. In this study, instructors were defined as full-time and part-time faculty members and paid graduate assistants. The sample was obtained through a combination approach using convenience and chain sampling strategies. The researcher initially invited 10 college instructors personally known to her. After they completed the auditory IAT, each was asked to recommend an additional three participants.

Instrumentation

Two instruments were used to collect the data: a demographic questionnaire and the auditory Implicit Association Test (IAT).

Demographic questionnaire. The demographic questionnaire was in a paper-and-pencil format. It has 13 questions about the participants (age, gender, ethnic background, education, and teaching experience) and their language background (country of birth, first language, home language, and foreign language).

The auditory Implicit Association Test (IAT). The computer-based auditory IAT was used for this study. It measured automatic evaluative associations of two accented English (i.e., Latino- and Standard-) and two attributes (i.e., Good and Bad). The auditory IAT protocol for this study included eight sound stimuli and eight text stimuli. Latino- and Standard-accented speakers were selected from the Speech Accent Archives website (accent.gmu.edu) maintained by Weinberger (2014) at the George

Mason University. The selection criteria for the speakers were that they were males in their 20s and 30s, Standard-accented speaker was from the mid-Atlantic region in the US, and Latino-accented English speaker started to learn English as a foreign language at around 12 years old and lived in the US less than two years. The speakers read a short passage with neutral content. The words were downloaded. Eight digital sound files, each lasted about five seconds, were used as audio stimuli for this study. The text stimuli consisted of four bipolar pairs of traits describing evaluative judgment of language attitudes. They were: intelligent-ignorant, competent-helpless, friendly-alloof, and pleasant-rude.

The auditory IAT for this study was based on the method of standard and visual IAT, simply known as the IAT. Greenwald and Banaji (1995) introduced the IAT for the first time. In 1998, Greenwald, McGhee, and Schwartz released a more advanced version. The IAT measures reaction time, called latencies in the IAT studies, of participants to assess implicit attitudes. Greenwald and Banaji (1995) claimed the IAT could capture implicit attitudes that were under the control of automatically activated evaluation without the participants' awareness of that causation. Banaji and Greenwald (2013) claimed that the effectiveness of the IAT lies in the premise that individuals hold stereotypes or biases as a result of the accumulated past experiences stored in the human brain. They further explained that the participants cannot set aside these established stereotypes while they perform the IAT tasks.

Procedure

The demographic questionnaire and auditory IAT were administered in one session. The demographic questionnaire was in a paper-and-pencil format. The auditory IAT was computer-based. The researcher administered the auditory IAT to one person at a time in a quiet room. The researchers' laptop computer with built-in microphones was used to collect data. Once a participant sat in front of a laptop computer, each received the same verbal task instructions regarding how to take the auditory IAT. The participants had a chance to practice two trial blocks to familiarize themselves with two types of stimuli and task format. The audio clips and visual texts were presented in a series of testing blocks. Participants responded to the researcher-assigned association-compatible pairings (e.g., Standard accent/Good) or association-incompatible pairings (e.g., Standard accent/Bad) using two response keys, E or I key, on the computer keyboard. They were instructed to respond as quickly and accurately as possible.

The basic concept of this version of the IAT protocol was as follows. If test participants exhibited the briefest of hesitations when they were hearing an accented audio clip and saw it associated with the keyboard key that they were instructed to associate with "good attributes," then a potential bias was indicated when compared to their responses of a Standard- and Latino-accented English. In the protocol, the participants were asked to repeat these associations numerous times building a body of responses that generated the final IAT scoring at the end of the test.

Data Analysis

The data for this study were collected during seven-week period in Fall, 2015. A total number of 93 ($N = 93$) college instructors participated. The data analyses were conducted using SAS software.

Demographic Data

Among the 93 participants, there were 53 females (57%) and 40 males (43%). The age of participants ranged from 23 to 73 years old ($M = 38.8$, $SD = 11.5$). The range of teaching experience in years was from 0.5 years to 45 years ($M = 10.7$, $SD = 9.5$). There were nine bachelor's degree holders (9.7%), 46 master's (49.4%), and 38 doctorates (40.9%). The number of non-white ($n = 47$) and white ($n = 46$) was almost the same with 50.5% and 49.5% respectively. Among non-white ($n = 47$), the Asians ($n = 20$) represented the highest portion followed by Blacks ($n = 13$), Latinos ($n = 6$), Bi-racials ($n = 6$), and Middle Easterners ($n = 2$).

The participants were born in 20 different countries. More than half ($n = 57$, 61.5%) of participants were born in the US while the rest ($n = 36$, 38.7%) were born in Vietnam ($n = 7$), China ($n = 5$), Korea ($n = 4$), Venezuela ($n = 3$), Turkey ($n = 2$), and Taiwan ($n = 2$). One participant each was born in 13 different countries. As for the language background of study participants, English was the first language (L1) of 59 participants (63.5%). The rest of the participants ($n = 34$) described 13 different languages as L1. All of the participants attempted to learn foreign languages at certain points in their lives. However, 34 participants (36.6%) did not speak any foreign language, nine spoke two, and two spoke three foreign languages. There were two participants who spoke four to five foreign languages.

Implicit Accent Preference Data.

The auditory IAT measured latency (i.e., response time) of participants in milliseconds and produced d scores which determined the implicit preferences. The d scores vary from -2 to +2 and indicates the direction and magnitude of association. A score of zero indicates no preference. The d scores of Standard- vs. Latino-accented English were obtained which could be interpreted as implicit preference. For descriptive statistics, see Table 1 for the means, standard deviations, and 95% confidence interval of the auditory IAT d scores.

Table 1
Means, Standard Deviations, and 95% of Confidence Intervals of the Auditory IAT d Scores

Accent category	M	SD	95% CI
Standard- vs. Latino-	0.185	0.426	[1.020, -0.650]

Note. $N = 93$; M = mean; SD = standard deviation; CI = confidence interval.

The mean of the d scores for the Standard- vs. Latino- ($M = 0.185$) was positive. According to the scoring algorithm description in Inquisit 4.0 program (Draine, 2014), a positive mean of the d scores indicates a preference for the left side category and a negative mean of d scores indicates a preference for the right side category. The scoring algorithm section also describes the interpretations of d scores of the IAT regarding the strength of a preference. The d score between -0.15 and 0.15 indicates no preference.

The positive and negative d scores of 0.15 , 0.35 , and 0.65 are thresholds to indicate slight, moderate, and strong preferences respectively. Based on the interpretations of d scores of the IAT, the college instructors who participated in this study indicated a slight preference for the Standard-accented English over Latino-accented English.

Regression Analysis

The regression equation analysis was conducted to determine the effects of gender, teaching experience, language background, race/ethnicity, and rank on the implicit accent preferences. Prior to conducting the regression analysis, the researcher checked the assumptions of normality and homogeneity of variance. To evaluate the normality, the skewness (0.1177) and kurtosis (-0.1410) of the residuals from the regression model were calculated. The absolute values for skewness and kurtosis were within “1” indicating that the normality assumption was not violated. To assess the homogeneity of variance, the researcher checked the residuals against the predicted values. They scattered equally around “0” line indicating that the assumption of homogeneity was not violated. See Table 2 for the regression analysis for outcome of Standard- vs. Latino-accented English model.

Table 2

Regression Analyses for Outcome of Standard vs. Hispanic-accented English Model
Regression Analysis for Outcome of Standard- vs. Latino-accented English Model

Predictor variable	b	SE	p^*
Intercept	0.1576	0.1564	0.3162
Gender	-0.0557	0.0922	0.5478
Teaching experience (years)	-0.0049	0.0062	0.4368
Language background (L1)	0.0830	0.1153	0.4737
Race/ethnicity	0.0287	0.1109	0.7963
Rank	0.0779	0.1187	0.5133
	$r = 0.1944$	$R^2 = 0.0378$	

Note. $N = 93$; $b = \beta$ coefficient, SE = standard error; $^*.05 \alpha$ level.

The effects of each predictor variable on implicit preference score are presented by the beta coefficients (b). The difference between male and female participants was -0.0557 in the implicit preference score given other variables being constant. In other words, male participants had 0.0557 point higher score than females on average. However, the results suggested no significant effect of gender on the implicit preference score, since the p value of gender variable was 0.5478 , which was greater than $.05$ alpha level.

Regarding the teaching experience, the more years of experience the college instructors had, the average implicit preference score was 0.0049 point lower. For the language background, participants whose home language was not English had an average 0.0830 point lower score than the ones whose home language was English. For the race/ethnicity, non-white participants had an average 0.0287 point lower than white on the implicit preference score. For the rank, teaching assistants had an average 0.0779 point lower than faculty on the implicit preference score. However, the result suggested the teaching experience, language background, race/ethnicity, and rank had no significant effect on the implicit preference score since all the p values were greater than .05 alpha level.

Findings

Research question 1 was “What are the implicit preferences of college instructors toward Latino-accented English as by the auditory Implicit Association Test (IAT)?” The results indicated the 93 college instructors ($N = 93$) who participated in this study had slight implicit preference for Standard-accented English over Latino-accented English. Research questions 2-6 were “Does this implicit preference differ by gender, teaching experience, language background, race/ethnicity, and rank?” A regression analysis for outcome of Standard- vs. Latino-accented English model suggested gender, teaching experience, language background, race/ethnicity, and rank had no significant effects on the implicit preference scores.

Concluding Remarks

The purpose of this study was to examine the implicit language attitudes of college instructors ($N = 93$). The researcher customized a widely used psychometric instrument, commonly known as the IAT, to assess the implicit attitudes toward Standard- vs. Latino-accented English. The effectiveness of the IAT lies in the premise that individuals hold stereotypes or bias as a result of accumulated past experiences stored in the human brain. The participants cannot set aside these established stereotypes while they perform the IAT tasks.

Based on the results of this research, there were slight biases toward Latino-accented English in favor of Standard-accented English. Gender had no effect on the implicit preferences towards Latino-accented English. Similarly, home language background, the years of teaching experience, home language, race/ethnicity, and rank had no effect on the implicit preferences towards Latino-accented English.

Limitations

The previous IAT studies have mostly been visual. For this study, the researcher imbedded audio stimuli in Inquisit 4.0 software which was released in 2014. Although the result of this manipulation opened a new way to measure implicit accent bias, this study has limitations. This protocol was formally used for the first time with the latest

software version. Attempts to control voice tone, accent strength (understandability), and speech rate of the accented English speakers were made so that they were as similar as possible. However, the researcher's experience with administering the test indicated that more emphasis was needed on controlling these attributes of the audio clips. In addition, task-irrelevant errors could have occurred due to environmental confounding factors such as incidental background noises during the test administrations.

Implications and Recommendations

College instructors in this study seemed to have a slight preference toward Standard-accented English over Latino-accented English. Faculty, educational administrators, and students could use this study as a topic of discussion in faculty development, teaching assistant training, student services, diversity training, and hiring practices in higher education institutions. It potentially would aid in raising the awareness about hidden-yet-present accent bias and prevention of potential prejudice toward Latino-accented English speakers.

Further research can be conducted to examine the source of some biases toward Latino-accented speakers. In addition, to help move the implicit accent studies to next phase, further research regarding under what conditions these implicit accent biases will predict and change behavior can be conducted. This study can also be expanded to examine the hidden accent bias in different sectors in society. It might help shed light on understanding how this type of bias impacts different relationships in society.

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